

and works ranged from dietetics to zoology, from botany to mineralogy. He started his career as a physician in several localities of the Austrian Empire (Trent, Graz, Vienna, and Carniola in Slovenia) and was subsequently appointed as professor of Botany and Chemistry first at Schemnitz (now Czechoslovakia) and finally at the University of Pavia. His ornithological writings are included in the *Anni Historico-naturales* (1769–1772), *Introductio ad historiam naturalem* (1777) and in *Deliciae Florae et Faunae Insubricae* (1786–88), where he described several new species and genera of birds (such as *Sylvia*, *Apus*, *Branta*) in accordance with Linnaeus' system.

An early appreciation of Scopoli's ornithology is documented by a famous letter by Gilbert White: "Scopoli's characters of his ordines and genera are clear, just and expressive, and much in the spirit of Linnaeus. There is room to expect great things from the hands of that man, who is a good naturalist; and one would think that a history of the birds of such a distant and southern region as Carniola would be new and interesting. Every kingdom, every province should have its own monographer. . .". The influence that Scopoli had on Italian ornithology was to be noticed in the long run, as it inspired directly or indirectly a series of regional works on birds from several districts, such as—among others—Bonelli's Catalogue of the birds of Piedmont, and Savi's Tuscan Ornithology. Scopoli's adherence to the Linnaean rules (but not as blindly as Stresemann hastily remarked) helped to consolidate the use of the binomial system in the ornithological literature of our country.

Birds of a northern Venezuelan secondary-scrub habitat

by Betsy Trent Thomas

Received 21 February 1992

Secondary-scrub habitat is distributed widely in the neotropics, and increasing especially in areas adjacent to growing urban populations. Although this habitat generally ranges from Mexico to Argentina, few long-term observations have been published about the birds of this community. In addition to the obvious application to conservation, of a species list at a site likely to undergo further alteration and degradation, there are other uses for such a list. Monthly presence, abundance, breeding, and moult records for over 19 years indicate which species are resident and which are long-distance migrants, both North American and austral. Less clear are Venezuelan species that use secondary-scrub habitat seasonally and are probably local wanderers, or are genuinely uncommon birds.

The Appendix is a compilation of data collected mostly from April 1966 through June 1984. It gives 191 species, of which *c.* 36% ($n=69$) are residents of the study site or nearby areas, *c.* 7% ($n=13$) are North American migrants, and *c.* 3% ($n=6$) are believed to be austral migrants. Austral is used in the sense of south of Venezuela, not necessarily south of the equator.

Study site and methods

The 147 ha site of this study was Urbanización Los Anaucos which is 30 km south of Caracas, Venezuela, in the state of Miranda at 10°19'N, 66°51'W. This area consists of steep (up to 45% grades) south-facing

foothills of the Coastal Cordillera that surrounds Caracas. The original forest was cleared over 400 years ago, resulting in the impoverished and degraded low deciduous forest of the present. In the early years of this century the land was part of a large hacienda, and in the 1930s much of it was cleared for coffee growing with *Erythrina poeppigiana* trees planted to shade the coffee. Coffee growing here was not a success, probably because of insufficient rainfall, and much of the land was allowed to regenerate. By the mid-1950s most of the study area had been converted to a residential neighbourhood built on the steep hills surrounding a golf club in the valley. The houses, and their access of paved streets, were widely separated. In 1964 a 4-lane limited-access highway cut off the higher-elevation part of Los Anaucos. This 6-ha forested section at 825–1010 m had a few lingering coffee shrubs, a closed canopy *c.* 20 m high of indigenous trees, and occasional large bamboo clumps. It was not subjected to wildfires.

Most bird observations were made in the lower (550–800 m) area of 141 ha. A seldom-used golf course and soccer field (*c.* 48 ha) were in the valley. The area surrounding the valley was intersected by many dry watercourses and gullies that carried surface water only during heavy rains. The deciduous vegetation was generally less than 10 m high consisting of native trees and abundant vines with an open understory, and some large bamboo clumps. In the valley, partly bordered by the golf course, was the Quebrada Caiza, a small permanent watercourse that supported a richer and higher native vegetation (trees to 25 m) along its edge. Extensive secondary grass-covered hillsides surrounded much of the study area. During the dry season frequent wildfires swept drier areas, destroying all surface vegetation. In April 1977 such an area was burnt, and from 1981 to 1984 I studied more intensively the birds of a 13 ha section of the regenerating habitat where the dominant vegetative species was mesquite *Prosopis juliflora*. Opportunistic mist-netting (543 net hr), mostly to colour-band birds, was done mainly in this 13-ha site from 1976 to 1984. Weights of those birds were reported (Thomas 1982, 1990), and additional detailed data for two species are in Thomas (1977, 1983).

Ewel & Madriz (1968) list the area as *bosque seco premontano transición*, giving 865 mm average annual rainfall. Rainfall collected in the valley from June 1982 through May 1984 averaged 678 mm for the two years. Those may have been drier years than usual or, more likely, because the Los Anaucos site is in a rain shadow of adjacent higher mountains to the north. The usual seasonal rainfall pattern was of little precipitation December through March, the dry season, to heavier rains June to September, the wet season. The months of April–May and October–November were variable throughout the years of study. Rains sometimes began in April, and in other years rain continued into November. This same irregular rainy season was found in the llanos of Venezuela (Thomas 1985). The annual temperature of the valley varied from 14° to 39°C.

During the years of this study I lived at two different locations in the study area and made 348 census counts, generally in the morning averaging 3 h each. These data were supplemented with opportunistic observations throughout the day and vocalization records in the night. In addition I visited the study area for five days in February 1987 and three

days in May 1988. Due to the steep nature of the terrain it was never possible to survey all the study area in a single day, but an effort was made to visit most different micro-habitats throughout the year.

Nomenclature and sequence generally follow the AOU Checklist (1983), with Tyrannidae following Traylor (1977) and Thraupidae following Isler & Isler (1987).

Discussion and results

The breeding season of most neotropical birds appears to be rainfall dependent (Friedmann & Smith 1950, 1955, Snow & Snow 1964, Haverschmidt 1968, French 1973, Thomas 1979). Friedmann & Smith (1950, 1955) published a detailed account of eight years of observations and collecting in the Venezuelan states of Anzoátegui and Monagas, an area approximately 300 km southeast of the Los Anaucos site. However, their area differed from Los Anaucos because the vegetation was not second growth, and the altitude was lower with higher rainfall. Approximately 65% of the species in the Appendix are found also on their list.

Agreeing with Haverschmidt (1975), I did not find *Colombina passerina* and *C. minuta* in the same micro-habitats. *C. passerina* was found only in the 13-ha valley wildfire area at 550 m, while *C. minuta* was found at about 700 m where vegetation was less subject to wildfires. *Columbina talpacoti* was sympatric with both smaller doves.

The breeding data in the Appendix agree generally with other long-term Venezuelan observations (Friedmann & Smith 1950, 1955, Thomas 1979), with the exception of that for *Ortalis ruficauda*. Friedmann & Smith list April–June as breeding months. Schäfer (1953–1954) said that it breeds at the same time as in the llanos, May to the end of July. Lapham (1970) found breeding in the llanos May–June. However, for the ranch Masaguaral, Estado Guárico, close to Lapham's study site, I have a record of a nest with a fresh egg on 16 March 1981 (unpublished).

My Los Anaucos records for *Ortalis* are all based on observations of young chicks. On 17 January 1977 I encountered three adults, in thick high vegetation, leading two stripe-headed downy chicks, of c. 10 cm, that were unable to fly. On 24 March 1974 I found a downy young bird of c. 12 cm that could run well on the ground but not fly. Its parents were carrying banana from my nearby bird feeder to it. By 31 March this same chick was still covered with rufous body down with strong, dark crown and nape stripes, but it could fly about 1 m distance, and was brought by its parents to the bird feeder, where it was fed bananas. On 29 October 1971, near dusk, I found two adults at about 3 m high in a thorny tree guarding a very young chick. This chick was downy as described above, it could not fly and it balanced unsteadily in the tree branches.

The hummingbird breeding season is in the dry season at Los Anaucos, just as Snow & Snow (1964) found in Trinidad, with one exception. *Phaethornis augusti* bred in the wet season. Two reasons may account for this difference. It may need rain to make mud available with which its pendent nest is balanced (Gilliard 1959), and I believe it is more insectivorous than other hummingbird species.

I give breeding data for 90 spp., but Snow & Snow (1964) suggested that the timing of moult might be an even more precise way of determining breeding. Therefore, I have included moult data in the Appendix, for 33 species that I found in remigial or rectricial moult from mist-netting. This extends the data for seven species for which I lacked more direct breeding observations.

In the Appendix, an 'x' indicates that the bird was observed during the month; a 'B' indicates breeding as determined by nest building, copulation, a nest with eggs or young, or counted back from observations of adults feeding recently fledged young; a '.' indicates the species was not observed in that month in any of the 19 years. A bracket indicates primary or rectricial moult in the months bracketed. Abundant means that the species can always be found on the study site, common that it is likely to be encountered on 75% or more of censuses, fairly common on 50% of the censuses, uncommon on 25%, and occasional on less than 25% of field censuses. Rare indicates that I found the species less than five times. A few birds were found only in the higher-elevation forest and they are marked 'forest'.

Acknowledgements

I wish to thank the Alexander Wetmore Award fund of the American Ornithologists' Union, the Smithsonian Institution, and John B. Trent for financial support. Many people have assisted me in numerous ways over the years. C. T. Collins taught me about mistnetting and encouraged me in many ways; others who have been generously helpful were A. and K. Altman, C. Parrish, R. Aveledo, O. Huber, J. Hinshaw, D. Zusi, M. Foster, and the late P. Schwartz.

References:

- American Ornithologists' Union. 1983. *Check-list of North American Birds*, 6th ed. American Ornithologists' Union.
- Ewel, J. J. & Madriz, A. 1968. *Zonas de Vida de Venezuela*. Ministerio de Agricultura y Cria, Republica de Venezuela.
- french, R. 1973. *A Guide to the Birds of Trinidad and Tobago*. Livingston Publishing Co., Wynnewood Pa.
- Friedmann, H. & Smith, F. D., Jr. 1950. A contribution to the ornithology of northeastern Venezuela. *Proc. U.S. Nat. Mus.* 100: 411-538.
- Friedmann, H. & Smith, F. D., Jr. 1955. A further contribution to the ornithology of northeastern Venezuela. *Proc. U.S. Nat. Mus.* 104: 463-524.
- Gilliard, E. T. 1959. Notes on some birds in northern Venezuela. *Am. Mus. Novit.* no. 1927.
- Haverschmidt, F. 1968. *Birds of Surinam*. Oliver & Boyd, Edinburgh and London.
- Haverschmidt, F. 1975. The Plain-breasted Ground Dove in Surinam. *Condor* 77: 355-356.
- Isler, M. L. & Isler, P. R. 1987. *The Tanagers: Natural History, Distribution, and Identification*. Smithsonian Institution Press, Washington, D.C.
- Lapham, H. 1970. A study of the nesting behavior of the Rufous-vented Chachalaca (*Ortalis r. ruficauda*) in Venezuela. *Bol. Soc. Venez. Cienc. Nat.* 28(117/118): 291-329.
- Schäfer, E. 1953-1954. Estudio bio-ecologico comparativo sobre algunos *Cracidae* del norte y centro de Venezuela. *Bol. Soc. Venez. Cienc. Nat.* 80: 30-63.
- Snow, D. W. & Snow, B. K. 1964. Breeding seasons and annual cycles of Trinidad land-birds. *Zoologica* 49: 1-39.
- Thomas, B. T. 1977. Tropical Screech Owl nest defense behavior and nestling growth rate. *Wilson Bull.* 89: 609-612.
- Thomas, B. T. 1979. The birds of a ranch in the Venezuelan llanos. Pp. 213-232 in J. F. Eisenberg (ed.), *Vertebrate Ecology of the Northern Neotropics*. Smithsonian Press, Washington, D.C.
- Thomas, B. T. 1982. Weights of some Venezuelan birds. *Bull. Brit. Orn. Cl.* 102: 48-52.
- Thomas, B. T. 1983. The Plain-fronted Thornbird: nest construction, material choice and nest defense behavior. *Wilson Bull.* 95: 106-117.
- Thomas, B. T. 1985. Coexistence and behavior differences among the three western hemisphere storks. Pp. 921-931 in P. A. Buckley, M. S. Foster, R. S. Ridgely & F. S.

Buckley (eds), *Ornithological Monographs no. 36*. American Ornithologists' Union. Washington, D.C.

Thomas, B. T. 1990. Additional weights of Venezuelan birds. *Bull. Brit. Orn. Cl.* 110: 48-51.

Traylor, M. A., Jr. 1977. A classification of the tyrant flycatchers (Tyrannidae). *Bull. Mus. Comp. Zool.* 148: 129-184.

Address: Betsy Trent Thomas, Waterfield, Rt. 1, Box 212 C, Castleton, VA 22716, U.S.A.

© British Ornithologists' Club 1993

APPENDIX

Birds recorded at Los Anaucos, Estado Miranda, Venezuela

[illegible]

APPENDIX
Continued[illegible]

APPENDIX
Continued

Family and species	J	F	M	A	M	J	J	A	S	O	N	D	Abundance
FURNARIIDAE (6)													
<i>Synallaxis albenscens</i>	x	B	x	B	x	B	B	B	x	x	x	x	Common resident
<i>Synallaxis cinnamomea</i>	.	x	x	.	.	.	.	.	.	x	.	.	Rare
<i>Cranioleuca subcristata</i>	x	x	B	x	x	x	B	.	.	x	.	.	Occasional
<i>Phacellodomus rufifrons</i>	(x x)	x	x	x	B	B	B	B	B	x	x	(x)	Common resident
<i>Syndactyla guttulata</i>	.	.	x	.	x	.	.	.	.	.	.	.	Rare
<i>Xenops minutus</i>	.	.	x	x	.	.	.	.	.	.	.	.	Rare; only 1988
DENDROCOLAPTIDAE (6)													
<i>Dendrocinclafuliginosa</i>	x	x	.	.	.	.	.	.	.	.	x	.	Uncommon
<i>Sittasomus griseicapillus</i>	x	x	x	B	B	x	x	x	x	x	x	x	Uncommon resident
<i>Xiphocolaptes</i>													
<i>promeropirhynchus</i>	.	.	.	x	.	.	.	.	.	.	.	.	Rare
<i>Xiphorhynchus guttatus</i>	x	x	x	x	x	.	.	.	.	x	x	.	Occasional
<i>Lepidocolaptes souleyetii</i>	x	x	x	x	x	.	B	.	x	(x)	x	.	Uncommon resident
<i>Campylorhamphus trochilirostris</i>	x	x	x	x	x	x	x	x	x	x	x	x	Fairly common resident
FORMICARIIDAE (7)													
<i>Taraba major</i>	x	x	x	x	x	x	x	B	x	(x)	x	x	Fairly common resident
<i>Thamnophilus doliatus</i>	(x)	x	x	x	B	B	(x)	x	x	x	x	x	Common resident
<i>Herpilochmus</i>													
<i>rufimarginatus</i>	.	.	.	x	.	.	.	.	.	.	.	.	Rare
<i>Formicivora grisea</i>	x	x	x	x	x	x	x	x	x	(x)	x	x	Common resident
<i>Drymophila caudata</i>	.	.	x	x	B	.	.	.	.	.	.	.	Occasional
<i>Myrmeciza longipes</i>	x	x	x	x	B	B	x	x	(x	x	x)	x	Fairly common resident
<i>Grallaricula ferrugineipectus</i>	x	x	x	.	.	.	.	.	.	.	.	x	Rare
TYRANNIDAE (26)													
<i>Zimmerius vilissimus</i>	x	x	.	.	.	.	.	.	.	.	.	.	Rare
<i>Camptostoma obsoletum</i>	x	x	x	x	B	x	x	x	x	x	x	x	Common resident
<i>Phaeomyias murina</i>	x	x	x	x	x	x	x	x	x	x	x	x	Fairly common resident
<i>Sublegatus arenarum</i>	x	.	.	x	.	.	x	.	.	x	x	.	Occasional
<i>Myiopagis gaimardii</i>	.	x	.	.	.	.	.	.	.	.	.	.	Rare
<i>Myiopagis viridicata</i>	.	x	x	x	x	x	x	x	.	(x	x)	x	Uncommon
<i>Elaenia flavogaster</i>	x	(x)	x	x	x	x	x	x	x	x	x	x	Common resident
<i>Elaenia parvirostris</i>	.	.	.	.	x	x	x	x	.	.	.	.	Uncommon austral migrant
<i>Euscarthmus meloryphus</i>	x	x	x	x	B	B	x	x	x	x	(x)	x	Common resident
<i>Mionectus olivaceus</i>	x	.	.	x	.	.	.	.	.	.	.	.	Rare
<i>Leptopogon superciliaris</i>	x	B	B	B	B	x	.	.	.	x	x	.	Fairly common
<i>Phylloscartes flaveola</i>	x	x	x	x	x	x	x	x	x	x	x	x	Common resident
<i>Atalotriccus pilaris</i>	x	x	x	B	B	B	x	x	(x)	x	x	x	Common resident
<i>Todirostrum cinereum</i>	x	x	x	B	B	B	B	B	x	(x	x)	x	Common resident
<i>Tolmomyias flaviventris</i>	.	.	.	.	.	.	.	.	.	.	.	.	Rare
<i>Myiophobus fasciatus</i>	x	B	B	B	B	B	(B	x	x)	x	x	x	Common resident
<i>Contopus cinereus</i>	x	x	.	.	.	.	.	.	.	x	.	.	Rare
<i>Contopus fumigatus</i>	.	.	x	.	.	.	.	.	.	x	.	.	Rare, forest
<i>Cnemotriccus fuscatus</i>	x	x	x	x	x	B	x	x	(x	x)	x	x	Fairly common resident
<i>Myiarchus tyrannulus</i>	x	B	B	B	B	B	x	x	x	x	x	x	Common resident
<i>Pitangus sulphuratus</i>	x	B	B	B	B	B	x	x	(x)	x	x	x	Abundant
<i>Megarhynchus pitangua</i>	x	x	x	x	x	B	x	x	x	x	x	x	Uncommon

APPENDIX
Continued

Family and species	J	F	M	A	M	J	J	A	S	O	N	D	Abundance
<i>Myiozetetes cayanensis</i>	.	.	x	x	.	.	x	x	x	x	.	.	Occasional
<i>Myiozetetes similis</i>	x	x	x	B	B	B	x	.	.	x	x	x	Occasional
<i>Myiodynastes maculatus</i>	.	.	.	x	B	.	.	.	.	.	.	.	Rare vagrant
<i>Tyrannus melancholicus</i>	x	x	x	x	x	x	x	x	x	x	x	x	Fairly common resident
COTINGIDAE (3)													
<i>Pachyrhamphus rufus</i>	x	x	x	x	x	x	.	B	x	x	x	x	Fairly common
<i>Pachyrhamphus castaneus</i>	.	x	x	.	.	.	.	.	.	.	.	.	Rare; 1970 & 1977
<i>Pachyrhamphus polychopterus</i>	.	x	.	.	x	x	.	.	.	.	.	.	Rare
PIPRIDAE (1)													
<i>Chiroxiphia lanceolata</i>	x	x	x	x	B	B	x	.	x	x	x	x	Fairly common resident
HIRUNDINIDAE (3)													
<i>Notiochelidon cyanoleuca</i>	x	x	x	B	x	.	x	x	x	x	.	x	Occasional
<i>Stelgidopteryx ruficollis</i>	x	x	x	x	B	x	x	x	x	x	x	x	Occasional
<i>Hirundo rustica</i>	.	.	.	.	.	.	.	.	.	.	.	x	Rare N. Am. migrant
TROGLODYTIDAE (4)													
<i>Campylorhynchus nuchalis</i>	x	B	x	x	B	x	x	x	x	x	x	x	Fairly common resident
<i>Thryothorus genibarbis</i>	x	x	x	B	B	x	x	x	x	(x)	x	x	Fairly common resident
<i>Thryothorus rutilus</i>	x	x	x	x	B	B	B	x	x	x	x	x	Common resident
<i>Troglodytes aedon</i>	x	x	x	x	x	x	B	B	B	x	x	x	Common resident
MUSCICAPIDAE (8)													
<i>Ramphocaenus melanurus</i>	x	B	x	x	x	x	x	.	x	x	x	.	Occasional
<i>Poliophtila plumbea</i>	x	x	x	B	B	B	x	B	x	x	x	x	Abundant resident
<i>Catharus aurantirostris</i>	x	x	x	x	x	x	x	x	x	x	x	.	Occasional, resident
<i>Catharus fuscescens</i>	.	.	.	.	.	.	.	.	.	x	.	.	Rare N. Am. migrant
<i>Catharus minimus</i>	.	.	.	x	.	.	.	.	.	.	x	.	Rare N. Am. migrant
<i>Turdus leucomelas</i>	x	x	x	B	B	B	x	x	x	x	x	x	Common resident
<i>Turdus fumigatus</i>	.	.	.	.	.	.	.	x	.	.	.	.	Rare, forest
<i>Turdus nudigenis</i>	x	x	x	x	B	B	B	x	(x)	x	x	x	Common resident
MIMIDAE (1)													
<i>Mimus gilvus</i>	B	B	B	B	x	x	x	x	x	x	B	B	Common resident
VIREONIDAE (5)													
<i>Cyclarhis gujanensis</i>	x	x	x	x	B	B	x	x	x	(x)	x	x	Common resident
<i>Vireo olivaceus</i>	.	x	x	x	x	.	.	x	.	.	.	.	Occasional
<i>Vireo gilvus</i>	.	.	.	.	.	.	.	.	.	x	.	.	Rare
<i>Hylophilus aurantiifrons</i>	x	x	x	x	x	x	.	B	(x)	x	x	x	Fairly common resident
<i>Hylophilus flavipes</i>	.	x	x	x	x	x	x	x	x	x	x	.	Uncommon
EMBERIZIDAE (53)													
<i>Vermivora peregrina</i>	x	.	.	x	.	.	.	.	.	.	.	.	Rare N. Am. migrant
<i>Parula pitiayumi</i>	.	x	x	x	.	.	.	.	.	.	.	x	Uncommon
<i>Dendroica petechia</i>	.	x	x	x	.	.	.	.	.	.	.	x	Rare N. Am. migrant
<i>Dendroica striata</i>	.	.	.	.	x	.	.	.	.	.	x	.	Rare N. Am. migrant
<i>Setophaga ruticilla</i>	x	x	x	x	x	.	.	.	.	x	x	x	Occasional N. Am. migrant
<i>Seiurus noveboracensis</i>	x	.	.	.	x	.	.	.	.	x	.	.	Rare N. Am. migrant
<i>Geothlypis aequinoctialis</i>	.	x	x	x	x	.	x	x	x	.	x	x	Occasional
<i>Oporornis agilis</i>	.	.	.	x	.	.	.	.	.	.	x	.	Rare N. Am. migrant
<i>Myioborus miniatus</i>	.	.	x	.	.	.	.	.	.	.	x	x	Rare, forest
<i>Basileuterus culicivorus</i>	x	x	x	x	x	.	x	.	x	x	x	x	Occasional
<i>Basileuterus flaveolus</i>	.	.	.	.	x	.	x	.	.	.	.	x	Rare

APPENDIX
Continued

Family and species	J	F	M	A	M	J	J	A	S	O	N	D	Abundance
<i>Coereba flaveola</i>	B	B	B	B	B	x	B	B	B	x	x	B	Abundant resident
<i>Thlypopsis fulviceps</i>	x	B	x	x	x	.	x	x	x	x	x	x	Occasional, resident
<i>Rhodinocichla rosea</i>	x	x	x	x	x	x	x	B	x	x	x	x	Fairly common
<i>Tachyphonus rufus</i>	x	x	x	x	B	B	B	B	(x	x	x)	x	Abundant resident
<i>Piranga rubra</i>	.	.	x	.	.	.	.	.	.	x	x	.	Rare N. Am. migrant
<i>Ramphocelus carbo</i>	x	x	x	x	x	x	B	B	x	x	x	x	Common resident
<i>Thraupis episcopus</i>	x	x	x	B	B	B	B	B	B	x	x	x	Common resident
<i>Thraupis sayaca</i>	.	.	.	B	B	.	x	(x)	x	.	.	.	Occasional
<i>Thraupis palmarum</i>	.	.	.	x	.	.	x	x	x	.	.	.	Uncommon
<i>Euphonia trinitatis</i>	x	B	x	B	x	.	x	x	x	x	.	x	Uncommon
<i>Euphonia lanirostris</i>	x	x	B	B	B	x	B	B	x	x	x	x	Fairly common resident
<i>Euphonia xanthogaster</i>	x	.	x	.	.	.	.	.	.	.	.	.	Rare; 1968 only
<i>Tangara guttata</i>	.	.	x	x	x	.	x	.	.	x	x	.	Uncommon
<i>Tangara cayana</i>	x	x	x	B	B	x	B	(x)	x	x	(B)	x	Fairly common
<i>Tangara cyanoptera</i>	.	.	x	x	x	.	x	x	.	B	x	.	Uncommon resident
<i>Cyanerpes caeruleus</i>	.	.	.	.	.	.	.	.	.	x	x	.	Rare, forest
<i>Tersina viridis</i>	.	.	.	x	B	.	.	.	.	x	.	.	Uncommon austral migrant
<i>Saltator coerulescens</i>	(x)	x	B	x	B	B	B	(x	B)	x	x	x	Common resident
<i>Saltator albicollis</i>	x	x	x	x	x	x	x	x	x	x	x	x	Fairly common resident
<i>Pheucticus ludovicianus</i>	.	.	.	.	.	.	.	.	.	x	.	.	Rare N. Am. migrant
<i>Cyanocopsa brissonii</i>	x	x	B	x	B	B	x	x	x	x	x	x	Fairly common resident
<i>Coryphospingus pileatus</i>	x	x	x	x	x	x	B	x	x	x	x	x	Uncommon
<i>Atlappetes semirufus</i>	.	.	.	.	x	.	x	.	.	.	.	.	Rare
<i>Arremon schegeli</i>	(x)	x	x	x	x	x	.	.	x	.	x	x	Occasional
<i>Arremonops conirostris</i>	x	x	x	B	B	B	B	B	B	(x	x)	x	Common resident
<i>Volatinia jacarina</i>	.	x	x	x	x	B	B	B	B	x	x	x	Uncommon
<i>Sporophila intermedia</i>	x	x	x	x	x	x	x	B	x	x	x	x	Fairly common
<i>Sporophila bouvronides</i>	.	.	.	.	.	.	x	x	x	x	.	.	Occasional austral migrant
<i>Sporophila nigricollis</i>	x	x	x	x	.	x	x	B	B	B	x	x	Fairly common
<i>Sporophila obscura</i>	(x	x)	.	.	.	.	.	.	.	.	.	.	Rare
<i>Sporophila minuta</i>	x	x	x	x	x	.	x	.	x	.	.	.	Occasional
<i>Oryzoborus angolensis</i>	.	.	.	.	.	.	.	.	.	x	.	.	Rare
<i>Tiaris bicolor</i>	.	x	.	.	.	.	.	.	.	.	.	.	Rare
<i>Sicalis flaveola</i>	x	x	x	x	x	.	x	x	B	B	x	x	Uncommon
<i>Quiscalus lugubris</i>	x	x	x	x	x	B	x	x	x	.	.	.	Uncommon
<i>Molothrus bonariensis</i>	x	x	x	x	B	B	B	x	x	x	x	x	Common resident
<i>Icterus auricapillus</i>	x	x	x	x	x	x	.	B	B	B	x	B	Fairly common resident
<i>Icterus icterus</i>	.	.	.	.	.	.	x	.	.	.	.	.	Rare
<i>Icterus nigrogularis</i>	x	x	x	x	.	x	B	x	x	x	x	x	Common resident
<i>Cactus cela</i>	x	x	x	x	.	.	.	.	.	B	x	.	Occasional
<i>Psarocolius decumanus</i>	x	x	x	x	x	x	x	B	x	x	x	x	Uncommon
<i>Gymnomystax mexicanus</i>	x	x	x	x	x	x	x	x	x	B	x	(x)	Common resident
FRINGILLIDAE (1)													
<i>Carduelis psaltria</i>	(x)	x	x	x	x	x	.	x	x	B	x	x	Occasional